

Amendment to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application.

1. (Canceled)

PN 2. (Previously Amended) A differential amplifier, comprising:

- a differential input capable of receiving a differential signal;
- a first differential pair coupled to said differential input;
- a second differential pair, coupled to said differential input, and connected in parallel with said first differential pair at a differential output;
- a differential offset circuit, coupled between said differential input and said second differential pair, and capable of level shifting said differential signal from a first level to a second level; and
- a differential switch circuit, coupled to said first differential pair and said second differential pair, and capable of controlling a first current flow to said first differential pair and a second current flow to said second differential pair.

3. (Canceled)

4. (Canceled)

² 5. (Original) A differential amplifier, comprising:

a differential input capable of receiving a differential signal;

a first differential pair coupled to said differential input;

a second differential pair, coupled to said differential input, and connected in parallel with said first differential pair at a differential output; and

^{PN} a differential switch circuit, coupled to said first differential pair and said second differential pair, and capable of controlling a first current flow to said first differential pair and a second current flow to said second differential pair.

³ 6. (Original) The differential amplifier of claim ² 5, further comprising:

a differential offset circuit, coupled between said differential input and said second differential pair, and capable of level shifting said differential input signal from a first level to a second level.

⁴ 7. (Original) The differential amplifier of claim ² 5, wherein said differential switch circuit comprises:

a first switch MOSFET coupled between said first differential pair and a current source; and

a second switch MOSFET coupled between said second differential pair and said current source.

⁵~~8~~. (Original) A differential amplifier, comprising:

a differential input capable of receiving a differential input signal;

a first differential pair coupled to said first differential input, said first differential pair biased with a first power supply voltage and a second power supply voltage;

a second differential pair, coupled to said differential input, and connected in parallel with said first differential pair at a differential output, said second differential pair biased with said first power supply voltage and said second power supply voltage; and

a differential switch circuit, coupled to said first differential pair and said second differential pair, and capable of controlling a first current flow to said first differential pair and a second current flow to said second differential pair.

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⁶~~9~~. (Original) The differential amplifier of claim ⁵~~8~~, wherein said differential switch circuit changes said first current flow relative to said second current flow, based on a comparison between a common mode voltage of said differential input signal and a reference voltage.

⁷~~10~~. (Original) The differential amplifier of claim ⁵~~8~~, wherein said differential switch circuit increases said first current flow relative to said second current flow, when a common mode voltage of said differential input signal approaches said first power supply voltage.

⁸~~11~~. (Original) The differential amplifier of claim ⁵~~8~~, wherein said differential switch circuit decreases said first current flow relative to said second current flow, when a

common mode voltage of said differential input signal approaches said second power supply voltage.

12. (Canceled)

13. (Canceled)

14. (Canceled)

15. (Canceled)

16. (Canceled)

17. (Canceled)

18. (Canceled)

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⁹ 19. (Currently Amended) A method of extending an input signal range of a component that receives the input signal, comprising the ~~step~~ steps of:

- (1) level shifting a voltage of the input signal;
- (2) processing said level shifted voltage within the component; and
- (3) selecting a subcomponent, from a plurality of subcomponents within the component, to process said level shifted voltage.

¹⁰ ~~20~~. (Previously Amended) A method of extending an input signal range of a component that receives the input signal, comprising the steps of:

- (1) level shifting a voltage of the input signal;
- (2) processing said level shifted voltage within the component; and
- (3) responding to a comparison between a common mode voltage of the input signal and a reference voltage to select a subcomponent from a plurality of subcomponents within the component to process said level shifted voltage.

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¹¹ ~~21~~. (Previously Presented) The method of claim ~~19~~, wherein step (2) comprises the step of:

amplifying said level shifted voltage within the component.